NEBRASKA STATE FIRE MARSHAL OFFICIAL INTERPRETATION



Interpretation Number: 07-01

Date: 06-07

Pamphlet Number: NFPA 61, 1995 ed.

NFPA 70, 2002 ed.

Section(s): 11-1.2, Article 500.5 (c)

Comments:

Applies to all grain handling facilities. Not limited to grain elevators.

Question: What is the proper electrical classification for areas of a grain handling or other facility where combustible dust is present?

Response: Class II, Division I, Group G electrical classification must be met for locations meeting the description below.

- (1) Where combustible dust is in the air under normal operating conditions in quantities sufficient to produce explosive or ignitible mixtures, or
- (2) Where mechanical failure or abnormal operation of machinery or equipment might cause such explosive or ignitible mixtures to be produced, and might also provide a source of ignition through simultaneous failure of electric equipment, through operation of protection devices, or from other causes, or
- (3) In which combustible dusts of an electrically conductive nature may be present in hazardous quantities.

This includes all interior areas of a grain elevator, such as basement tunnels, work rooms, man lifts, boot pits, head houses, conveyor tunnels and galleries, processing towers, feed mills, interior of grain bins and flat storage buildings, and the interior area of grain receiving and load out buildings as well as any location where combustible dusts present a hazard. This can include dusts from flour, grain, wood, plastic and chemicals.

This interpretation applies to new structures, new equipment and/or new electrical installations only. Previously approved conditions can remain at the discretion of the authority having jurisdiction.

Signature: John & Falgione

Date:

Title: John E. Falgione, State of Nebraska Fire Marshal